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10/574,219	10/03/2006	Ulrike Schulz	P29299	2157
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1950 ROLAND	CLARKE PLACE		KARPINSKI, LUKE E	
RESTON, VA 20191			ART UNIT	PAPER NUMBER
			1616	
			NOTIFICATION DATE	DELIVERY MODE
			03/09/2009	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)		
	10/574,219	SCHULZ ET AL.		
Office Action Summary	Examiner	Art Unit		
	LUKE E. KARPINSKI	1616		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
<ul> <li>1) ☐ Responsive to communication(s) filed on 30 Ag</li> <li>2a) ☐ This action is FINAL.</li> <li>2b) ☐ This</li> <li>3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4)  Claim(s) 16-45 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 16-45 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or Application Papers 9)  The specification is objected to by the Examines 10)  The drawing(s) filed on is/are: a)  access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction	vn from consideration.  relection requirement.  r.  epted or b) □ objected to by the Edrawing(s) be held in abeyance. See	e 37 CFR 1.85(a).		
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/12/2009.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte		

### **DETAILED ACTION**

## Change in Examiner

The examination of this application will now be handled by Luke Karpinski; contact information can be found at the end of this action.

#### Terminal Disclaimer

The terminal disclaimer filed on 5/23/2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on US Application No. 10/574,230 has been reviewed and is accepted.

The terminal disclaimer has been recorded.

#### **Claims**

Claims 1-15 are canceled.

Claims **16-45** are currently pending and under consideration in this action.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims

- 2. Determining the scope and contents of the prior art.
- 3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 16, 18-27, 35-37, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,042,816 to Shen.

### **Applicant Claims**

Applicant claims a formulation comprising an activated aluminum antiperspirant, an alpha-hydroxycarboxylic acid, and water.

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Applicant further claims one or more activated aluminum salts, activated aluminum chlorohydrate, ratios of said antiperspirant to said hydroxycarboxylic acid, percentages of said components, said formulation having a yield point, application of said formulation to human skin, and a transparent antiperspirant hydrogel.

# Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Shen teaches compositions comprising enhanced antiperspirant salts, which reads on activated antiperspirants, alpha hydroxycarboxylic acids, and water (col. 4, lines 8-43 and col. 6, lines 45-57), as claimed in claims 16 and 38.

Shen further teaches aluminum chlorohydrate (col. 5, line 23 to col. 6, line 12) as claimed in claims 18, 19, and 38, an antiperspirant to hydroxycarboxylic acid ratio of 6.25:1 (table 2b), as claimed in claims 20-22 and 39, 18-45% antiperspirant (col. 7, lines 16-51), as pertaining to claims 23-25 and 40, 2-10% hydroxycarboxylic acid (col. 6, line 66 to col. 7, line 3), as pertaining to claims 26, 27, and 40, said formulations in clear gel emulsion form (col. 13, lines 56-62), as pertaining to claims 29, 30, and 41, compositions comprising an oil phase, a water phase and less than 20% emulsifier (example 8), as claimed in claim 30, said oil phase having a low volatility (example 8), as claimed in claim 31, and said compositions in antiperspirant formulations for topical application to the skin (col. 4, lines 39-41), as pertaining to claims 37 and 42.

Ascertainment of the differences between the prior art and the claims

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# (MPEP 2141.01)

Shen does not explicitly disclose an example wherein the claimed components, at the claimed percentages are combined into a single composition.

However, Shen does teach that all of said components within said percentages may be present in antiperspirant formulations.

# Finding of prima facie Obviousness Rational and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to select each component and combine them as instantly claimed because Shen suggests that the instant components can be combined or mixed together. In a prior art reference it is not necessary for all of the possible compositions to be exemplified in order for the art to render an invention obvious.

Regarding claims 35 and 36, Shen teaches the same formulations comprising the same components and percentages thereof. Therefore, Shen would necessarily have the same yield point as instantly claimed. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the same chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding claim 43 and the limitation of a hydrogel, a hydrogel is viewed to be a gel comprising water. The compositions of Shen comprise water and may be in gel form, therefore these compositions read on hydrogel.

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From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

2. Claims 17, 38-40, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,042,816 to Shen in view of US Patent Publication 2005/0265940 to Okada.

### Applicant Claims

Applicant claims said compositions comprising mandelic acid as said alpha hydroxycarboxylic acid.

# Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Shen are delineated above and incorporated herein. In particular Shen teaches alpha hydroxycarboxylic acids and percentages thereof, including lactic and glycolic (col. 6, lines 55-60).

Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)

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Shen does not teach mandelic acid as claimed in claims 17, 38-40, and 45 or any percentages thereof. This deficiency in Shen is cured by Okada. Okada teaches deodorant compositions comprising hydroxycarboxylic acids including glycolic, lactic, and mandelic [0021].

# Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

Regarding the utilization of mandelic acid, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Shen with mandelic acid as taught by Okada in order to produce the invention of instant claims 17, 38-40, and 45.

One of ordinary skill in the art would have been motivated to do this because Shen teaches odor control compositions comprising hydroxycarboxylic acids, including glycolic and lactic, and Okada teaches odor control compositions comprising hydroxycarboxylic acids including glycolic, lactic and mandelic. Therefore it would have been obvious to utilize the mandelic acid of Okada, with the formulations of Shen in order to utilize a hydroxycarboxylic acid which is known to be utilized in topical formulations for odor control.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to

one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

3. Claims 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,042,816 to Shen in view of US Patent Publication 2002/0077372 to Gers-Barlag et al.

# **Applicant Claims**

Applicant claims the formulation of claim 16 further comprising an O/W microemulsion, a microemulsion gel, polyethoxylated and/or polypropoxylated emulsifiers, and a process for producing said emulsion.

# Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Shen are delineated above and incorporated herein. In particular Shen teaches said formulations comprising clear O/W emulsion gels.

# Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)

Shen does not teach microemulsions or microemulsion gels as claimed in claims 28-33. This deficiency in Shen is cured by Gers-Barlag et al. Gers-Barlag et al. teach O/W microemulsions utilized as base compositions for antiperspirants (abstract [0030]-[0045].

Further, Shen does not teach polyethoxylated or polypropoxylated emulsifiers as claimed in claim 32. This deficiency is cured by Gers-Barlag et al. Gers-Barlag et al. teach the utilization of polyethoxylated compounds as emulsifiers in said emulsions [0129].

Further, Shen does not teach methods of making said emulsions comprising mixing all components and heating until phase inversion is achieved. This deficiency is cured by Gers-Barlag et al. Gers-Barlag et al. teach that such microemulsions may be produced by mixing the oil phase, water phase, and emulsifier and heating said compositions until phase inversion is met [0072], [0082], and [0099].

# Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

Regarding the limitations of microemulsions and microemulsion gels, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Shen with microemulsions and microemulsion gels as taught by Gers-Barlag et al. in order to produce the invention of instant claim(s) 28-33.

One of ordinary skill in the art would have been motivated to do this because Shen teaches compositions in gel emulsion form and Gers-Barlag teaches that microemulsions are advantageous for antiperspirant formulations. Therefore it would have been obvious to utilize the microemulsion of Gers-Barlag, with the formulations of Shen in order to more finely disperse the active compounds.

Regarding claim 32, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Shen with polyethoxylated emulsifiers as taught by Gers-Barlag et al. in order to produce the invention of instant claim 32.

One of ordinary skill in the art would have been motivated to do this because Shen teach emulsions comprising emulsifiers and Gers-Barlag et al. teach emulsions comprising polyethoxylated emulsifiers. Therefore it would have been obvious to utilize the polyethoxylated emulsifiers of Gers-Barlag et al., with the formulations of Shen in order to utilize an emulsifier know to be utilized in topical antiperspirant emulsion compositions.

Regarding claim 33, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Shen by mixing an oil phase, water phase, and emulsifier, heating said composition to achieve a phase separation and then cool said composition as taught by Gers-Barlag et al. in order to produce the invention of instant claim 33.

One of ordinary skill in the art would have been motivated to do this because Shen teaches emulsions and Gers-Barlag et al. teach methods of making emulsions. Therefore it would have been obvious to utilize the method of making an emulsion as taught by Gers-Barlag et al., with the formulations of Shen in order to utilize a known emulsion producing technique.

Regarding claim 34, the emulsifying agents of both Shen and Gers-Barlag et al. would necessarily meet the limitations of claim 34 due to the fact that applicant is simply describing what an emulsifiers does when mixed with an oil phase and a water phase.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,042,816 to Shen in view of US Patent Publication 2005/0265940 to Okada. as applied to claim 40 above, in further view of US Patent Publication 2002/0077372 to Gers-Barlag et al.

## **Applicant Claims**

Applicant claims the formulation of claim 40 further comprising an O/W microemulsion.

# Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Shen, Okada, and Gers-Barlag et al. are delineated above and incorporated herein.

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Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)

The combined compositions of Shen and Okada do not teach microemulsions as claimed in claim 41. This deficiency in Shen and Okada is cured by Gers-Barlag et al. Gers-Barlag et al. teach that microemulsions are preferred in antiperspirant emulsion compositions as delineated above.

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

Regarding claim 41, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the combined compositions of Shen and Okada with a microemulsion as taught by Gers-Barlag et al. in order to produce the invention of instant claim 41.

One of ordinary skill in the art would have been motivated to do this because Shen teaches compositions in gel emulsion form and Gers-Barlag teaches that microemulsions are advantageous for antiperspirant formulations. Therefore it would have been obvious to utilize the microemulsion of Gers-Barlag, with the formulations of Shen and Okada in order to more finely disperse the active compounds.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to

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one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

#### Conclusion

Claims 16-45 are rejected.

No claims are allowed.

# Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUKE E. KARPINSKI whose telephone number is (571)270-3501. The examiner can normally be reached on Monday Friday 9-5 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEK

/Mina Haghighatian/ Primary Examiner, Art Unit 1616